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Panasonic®

Operating Instructions Plasma Television

Model No. **TH-65PV600A**

VIERA



The attached speakers illustrated above are sold separately.

Customer's Record

The model number and serial number of this product may be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number

Serial Number

Matsushita Electric Industrial Co., Ltd.

Web Site : <http://panasonic.net/>

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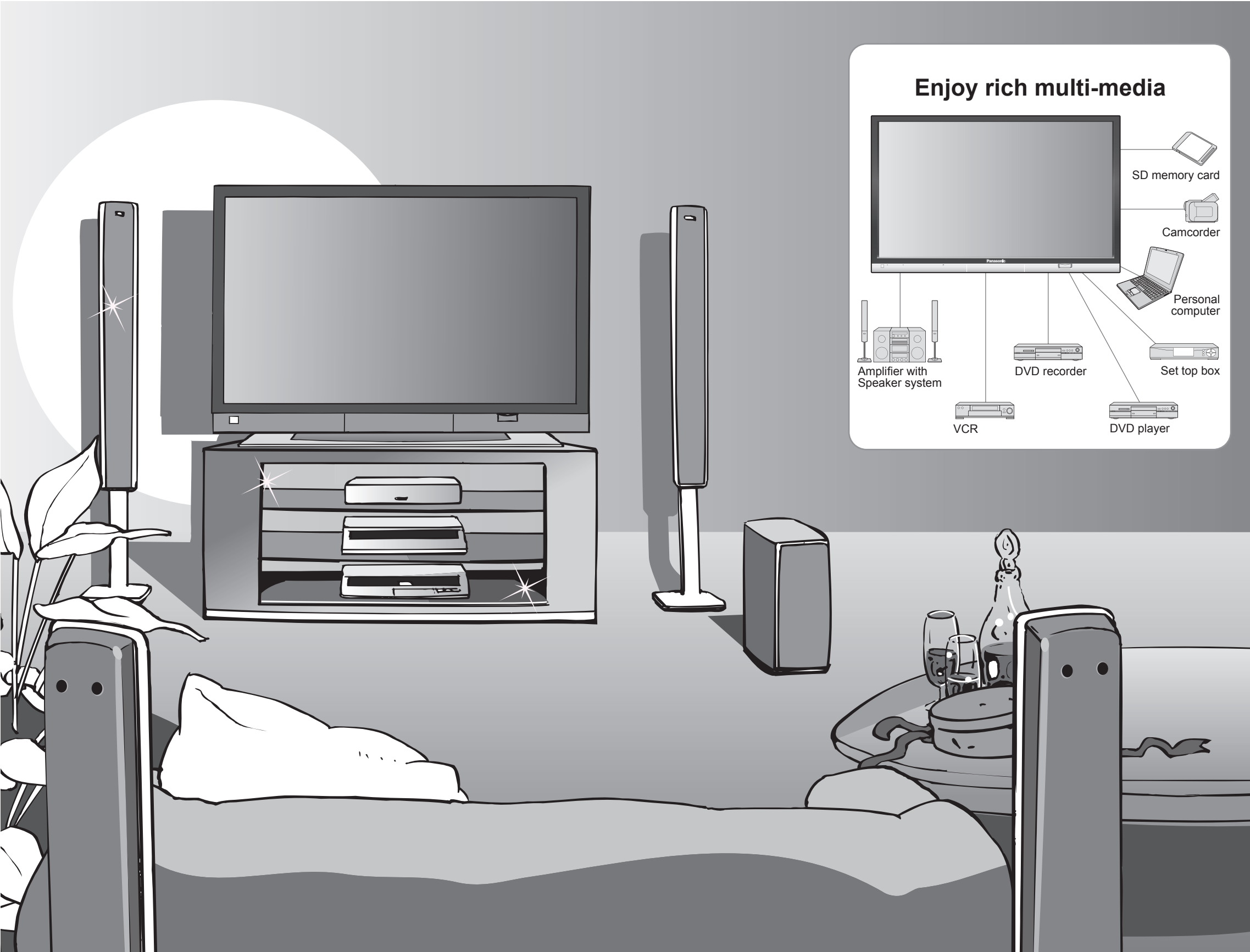
English

Please read these instructions before operating your set and retain them for future reference.
The images shown in this manual are for illustrative purposes only.



Turn your own living room into a movie theatre!

Experience an amazing level of multi-media excitement



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Enjoy your TV!

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Safety Precautions

Warning

■ Due to weight and size please ensure a qualified technician installs this product

Handling the mains plug and lead

- Insert the mains plug fully into the socket outlet. (If the mains plug is loose, it could generate heat and cause fire.)
- Ensure that the mains plug is easily accessible.
- Ensure the grounding pin on the mains plug is securely connected to prevent electrical shock.
- Do not touch the mains plug with a wet hand. (This may cause electrical shock.)
- Do not damage the mains lead. (A damaged lead may cause fire or electrical shock.)
 - Do not move the TV with the lead plugged in the socket outlet.
 - Do not place a heavy object on the lead or place the lead near a high-temperature object.
 - Do not twist the lead, bend it excessively, or stretch it.
 - Do not pull on the lead. Hold onto the mains plug body when disconnecting lead.
- Do not use a damaged mains plug or socket outlet.

If you find any abnormality, remove the mains plug immediately!

AC 220-240 V
50 / 60 Hz



Do not remove covers NEVER modify the TV yourself

(High-voltage components may cause serious electrical shock.)

- Have the TV checked, adjusted, or repaired at your local Panasonic dealer.

Do not place foreign objects inside the TV

- Do not let metal or flammable objects drop into the TV through the air vents (fire or electrical shock may result).

Do not expose to direct sunlight and other sources of heat

- Avoid exposing the TV to direct sunlight and other sources of heat. To prevent fire never place any type of candle or naked flame on top or near the TV.

Keep liquids away from the TV

- To prevent damage which may result in fire or shock hazard, do not expose this appliance to dripping or splashing.
- Do not place containers with water (flower vase, cups, cosmetics, etc.) above the TV. (including on shelves above, etc.)

■ Transport only in upright position

■ Do not place the TV on an unstable surface

■ Use only the dedicated stands / mounting equipment

- Using an unauthorized stand or other fixtures may make the TV shaky, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
- Use optional stands / mounts (p. 6).

■ As with a small object, SD card can be swallowed by young children. Do not allow children to handle SD card. Please remove SD card immediately after use.

Caution

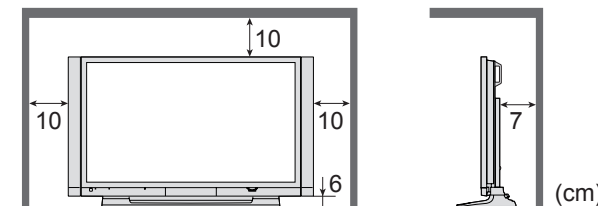
■ When cleaning the TV, remove the mains plug

(Cleaning an energized TV may cause electrical shock.)

■ When TV will not be used for a long time, remove the mains plug

- This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.

■ Allow sufficient space around the TV for radiated heat



■ Do not block the rear air vents

- Blocked ventilation by curtains, etc. may cause overheating, fire or electrical shock.



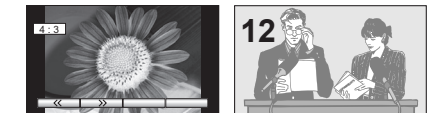
Notes

Remember not to keep still pictures on the screen for extended lengths of time

Such still pictures cause after-images on the plasma screen if they are displayed for a long time. These after-images are not considered malfunctions and are not covered by the warranty.

Typical still images

- Channel number and unique logos
- Image displayed in 4:3 mode
- Video game
- Computer image



To decrease the chance of after-images, a screen saver will be automatically activated after a few minutes if there is no signal and if there is no operation in AV mode. (p. 35) The screen saver will be automatically deactivated when a signal is detected or an operation is executed.

■ Keep the TV away from these equipment

- Electronic equipment
In particular, do not place video equipment near the TV (electromagnetic interference may distort images / sound).
- Equipment with an infrared sensor
This TV also emits infrared rays (this may affect operation of other equipment).

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

Daily care: Gently wipe the surface clean of dirt by using a soft cloth.

Major contamination: Wipe the surface clean using a soft cloth dampened with clean water or water containing a small amount of neutral detergent. Then, using a soft dry cloth, evenly wipe the surface clean until it is dry.

Caution

- The surface of the display panel has been specially treated and may be easily damaged. Do not tap or scratch the surface with your fingernail or other hard object.
- Use care not to subject the surface to bug repellent, solvent, thinner, or other volatile substances (this may degrade surface quality).

Cabinet

Daily care: Wipe the surface clean using a soft dry cloth.

Major contamination: Dampen a soft cloth with clean water or water containing a small amount of neutral detergent. Then, wring the cloth and wipe the surface clean with it. Finally, wipe the surface clean with a dry cloth.

Caution

- Use care not to subject the TV's surfaces to detergent. (A liquid inside the TV could lead to product failure.)
- Use care not to subject surfaces to bug repellent, solvent, thinner, or other volatile substances (this may deteriorate the surface by peeling the paint).
- Do not allow the cabinet to make contact with a rubber or PVC substance for a long time.

Mains plug

Wipe the mains plug with a dry cloth at regular intervals. (Moisture and dust may lead to fire or electrical shock.)

Accessories / Options

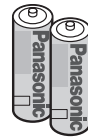
Standard accessories

- ☐ Remote Control Transmitter
- N2QAYB000069



Check that you have the accessories and items shown ☒

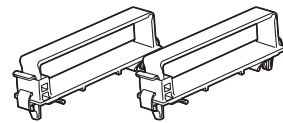
- ☐ Batteries for the Remote Control Transmitter (2)
- R6 (AA)



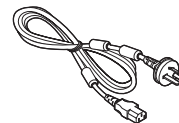
- ☐ Operating Instructions

- ☐ Guarantee

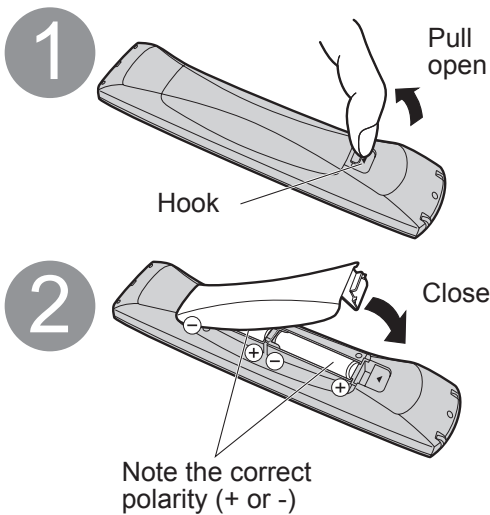
- ☐ Clamper (2)



- ☐ Mains Lead



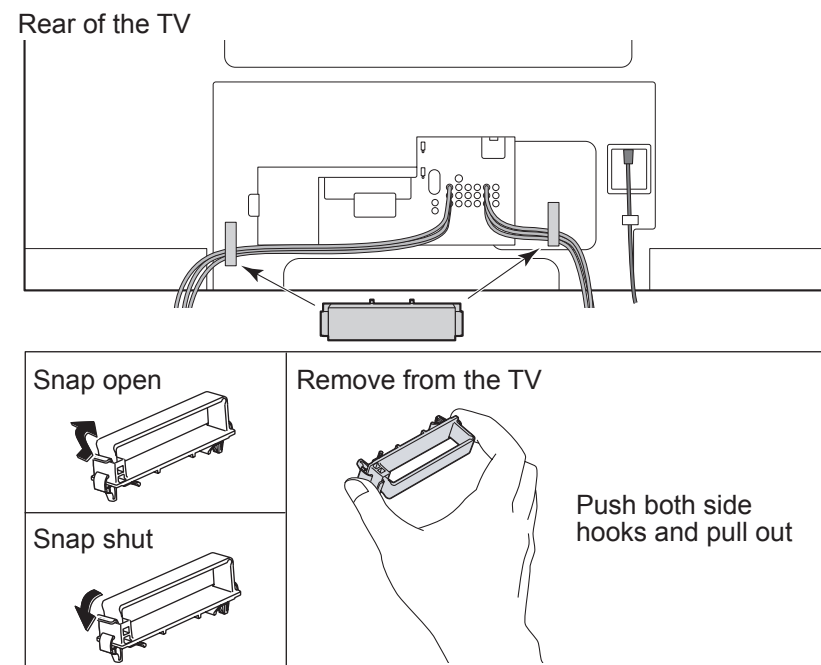
Installing remote's batteries



Caution

- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or breakup batteries.

Attaching the cable clampers



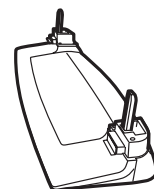
- Do not bundle the RF cable and mains lead together (could cause distorted image).
- Fix cables with clampers as necessary.
- When using the optional accessory, follow the option's assembly manual to fix cables.

Optional accessories

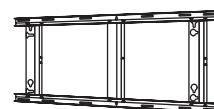
- Speakers
- TY-SP65PV600



- Pedestal
- TY-ST65PV500



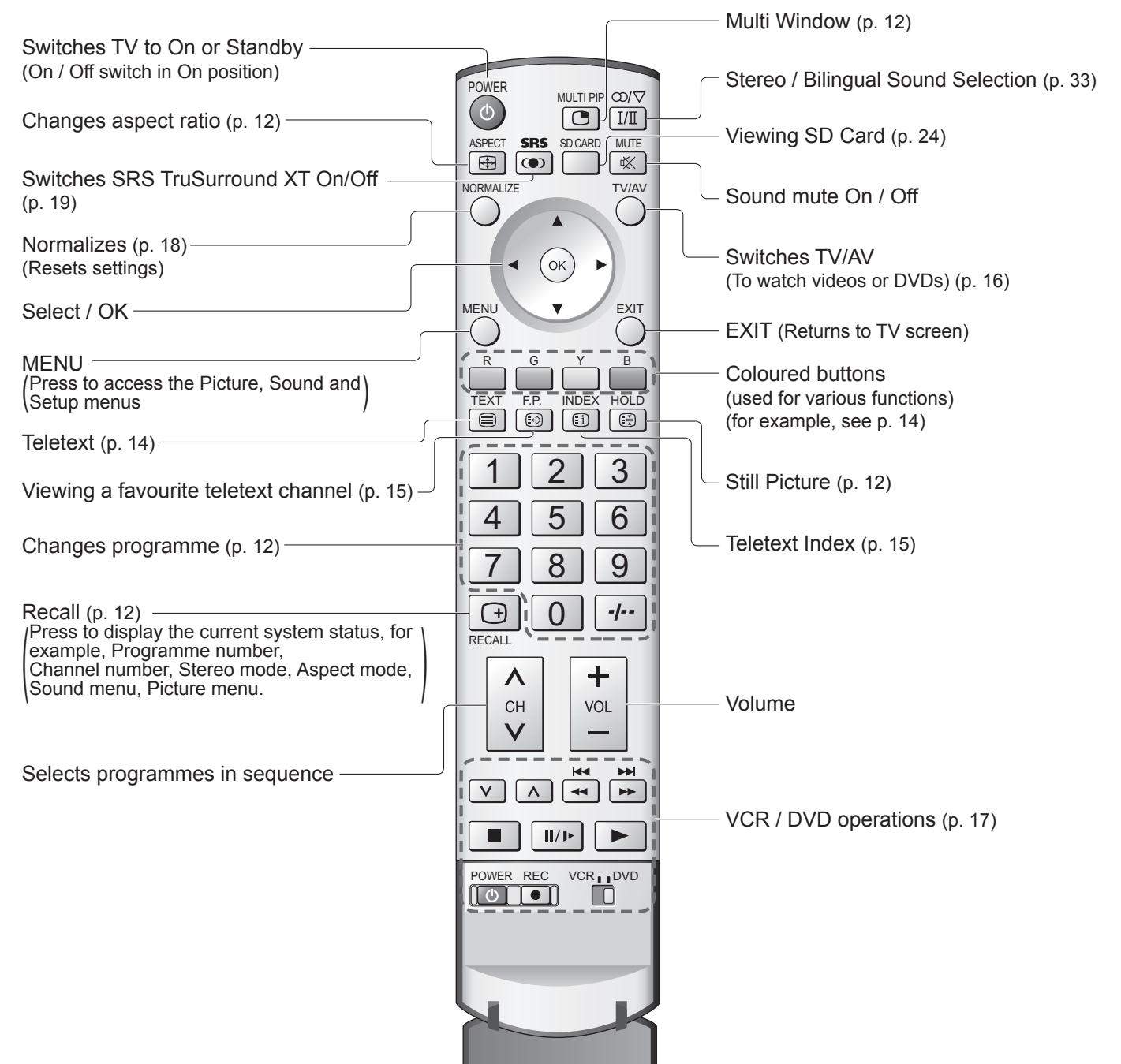
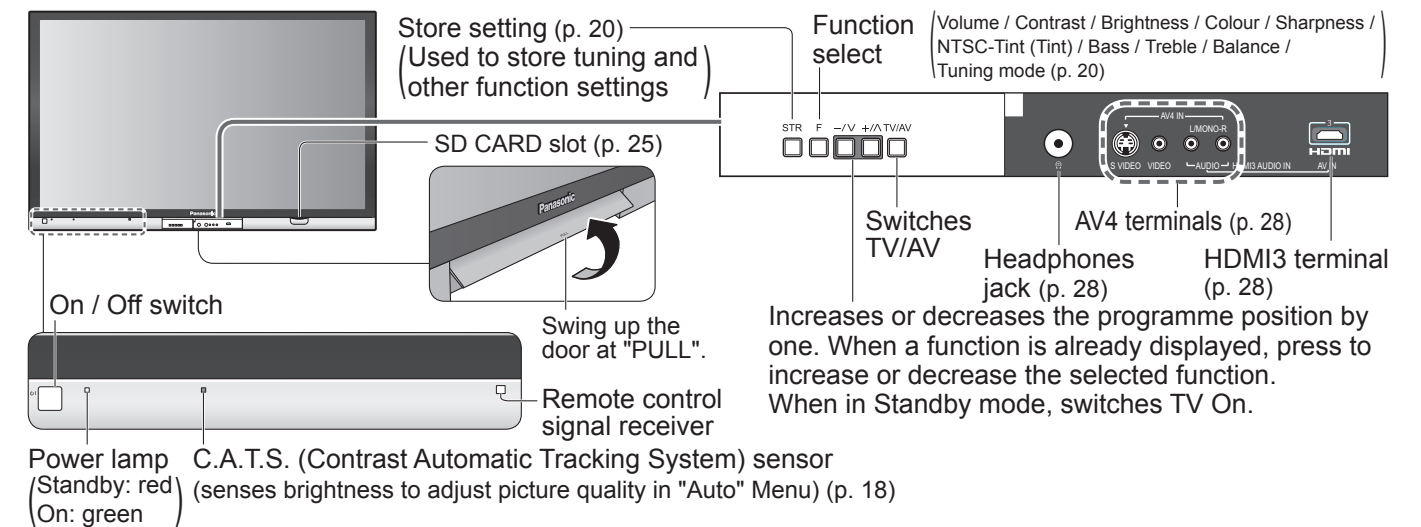
- Wall-hanging bracket (vertical)
- TY-WK65PV7



Caution

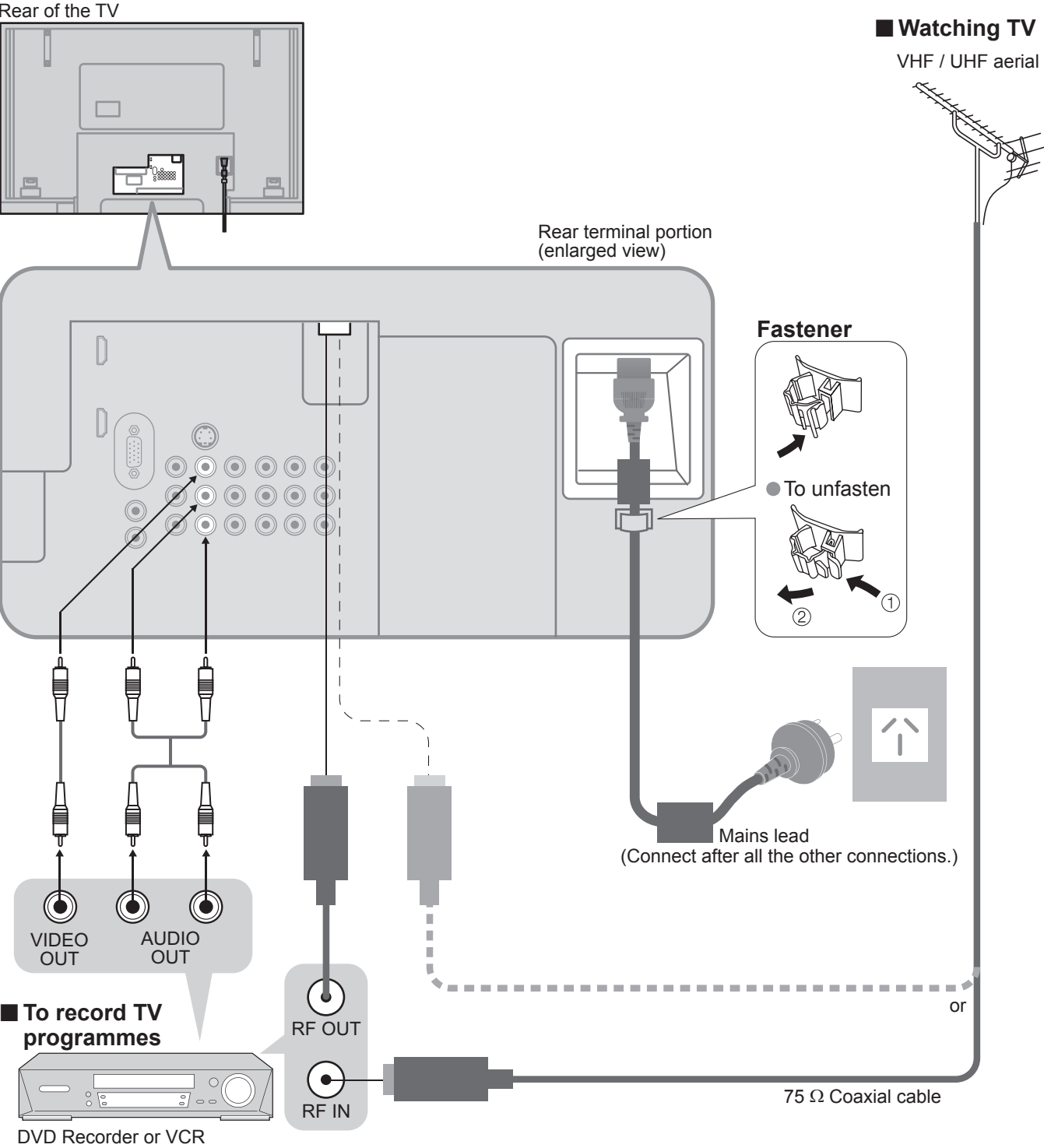
- In order to maintain the unit's performance and safety, be absolutely sure to ask your dealer or a licenced contractor to secure the wall-hanging bracket.
- Carefully read the instructions accompanying the speakers or pedestal, and be absolutely sure to take steps to prevent the TV from tipping over.
- Handle the TV carefully during installation since subjecting it to impact or other forces may cause product damage.

Identifying Controls



Connection

External equipments and cables shown in this manual are not supplied with this TV.
Please ensure that the unit is disconnected from the mains before attaching or disconnecting any leads.



- Note**
- Do not put the Coaxial cable close to the mains lead to avoid noise.
 - Do not place the Coaxial cable under the TV.
 - To obtain optimum quality picture and sound, an Aerial, the correct cable (75 Ω coaxial) and the correct terminating plug are required.
 - If a communal Aerial system is used, you may require the correct connection cable and plug between the wall Aerial socket and the TV.
 - Your local Television Service Centre or dealer may be able to assist you in obtaining the correct Aerial system for your particular area and the accessories required.
 - Any matters regarding Aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the Customer.

Initial Setup

These steps are not necessary if the setup has been completed by your local dealer.

1

Turn the TV On with the On / Off switch

- From now on you can use the remote control to turn On the TV or turn the TV to standby mode.

2

Input owner ID

Following the on-screen operation guide, enter your PIN number and name.

- For detailed procedures
→ "Owner ID" (p. 22)
- Make a note of the PIN number in case you forget it.

Usable characters and numerals

■ To input owner ID later
→ EXIT

- If you input the ID later
→ "Owner ID" (p. 22)

This TV has been pre-tuned by the factory to the following Australian TV channels.

Programme No.	Channel No.
2	2
7	7
9	9
10	10
28	28
31	31

If your location does not receive these channels, perform "Auto Tuning" (p. 10).

Need help with operations?
(example: Sound menu)

On-screen operation guide will help you.

Auto Tuning

Search and store TV channels automatically.

1

Display the menu

2

Select "Setup menu"

3

Select "Tuning menu"

4

Select the function

5

Set

MENU

OK

EXIT

2

access

1

select

2

access

1

select

2

next

1

select

1

select

2

change

3

store

1

select

2

start

1

select

12

AUTO SETUP IN PROGRESS
SEARCHING : PLEASE WAIT

Exit Return

Auto tuning is now complete and
your TV is ready for viewing.

1

select

2

change

3

store

1

select

2

start

1

select

12

AUTO SETUP IN PROGRESS
SEARCHING : PLEASE WAIT

Exit Return

Auto tuning is now complete and
your TV is ready for viewing.

■ To exit

→ EXIT

OK

Note

- If the image or sound is strange after Auto tuning, edit or adjust each channel
 - ➔ "Sound system", "Colour system", "Fine tuning" (p. 20)
- If you want to skip the channels which have no tuning datas
 - ➔ "Skip" (p. 20)
- If tuning has not done completely
 - ➔ "Manual tuning" (p. 20)

This TV has been pre-tuned to the Australian TV channels.
If the channels are received correctly, you do not have to perform "Auto Tuning".

① Sys select (System selection)

Select the system of your area.

(NZ/INDONES / Australia)

Sys select	REGION
NZ/INDONES	New Zealand, Indonesia, etc.
Australia	Australia

② Auto tuning

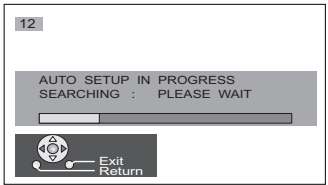
Automatically set the channels received in your area.

2

start

1

select



The TV will search for, locate, store and then sort into order your local stations.

Auto tuning is now complete and
your TV is ready for viewing.



Once Auto tuning is completed the
TV will display the programme now
stored on programme position 1.

- If it is not the first time to perform Auto tuning, all previous tuning datas will be erased.
- The broadcast stations in each region ➔ "Channel Allocation" (p. 30)
- To edit channels
 - ➔ "Editing and Setting Channels" (p. 20)

Watching TV

1

Turn power on
POWER (for about 1 second)
● On / Off switch on TV should be On.

2

Select a programme number
▲ up or 1 2 3
CH or 4 5 6
▼ down or 7 8 9
0 -/-

You can select the numbers directly by pressing Programme Number button and the two digit numbers by pressing Two Digit and Programme Number buttons.

Programme Number 8 8
Programme Number 12..... -/-, 1, 2

POWER

MULTI PIP

ASPECT

TV/AV

OK

R

G

Y

B

HOLD

1

2

3

4

5

6

7

8

9

+

0

-/-

RECALL

▲

CH

▼

+

VOL

-

Panasonic

TV

Volume

Hold

Display status information

Change aspect ratio

Watch TV, DVD, etc. in multi window

Other Useful Functions (Operate after 2)

Freeze / unfreeze picture



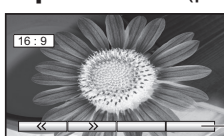
Display / hide status information

Press once to activate and press again to clear on screen display information.



- Displayed information:
For example, Programme number, Channel number, Stereo mode, Aspect mode, Sound menu, Picture menu.

Change the aspect ratio (p. 31)

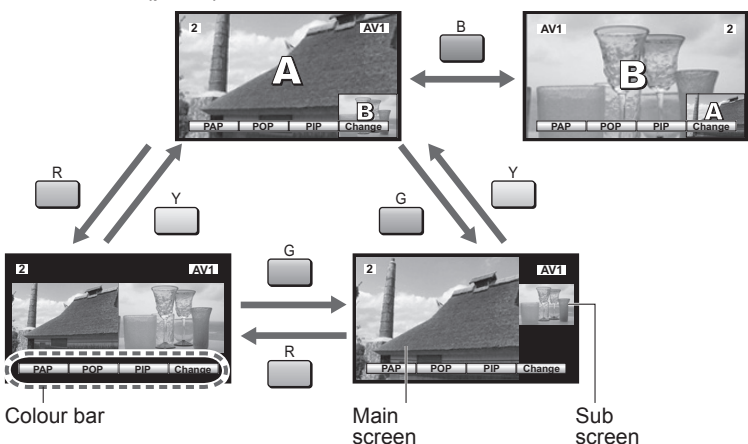


- Each press changes the mode.
(16:9 / 14:9 / Just / 4:3 / 4:3 Full (HD signal only) / Zoom1 / Zoom2 / Zoom3)

While the bar is displayed



View in multi window (p. 33)



To change the layout, etc. first show the colour bar

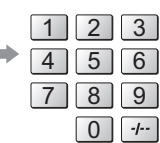


- To change the layout
→ R G Y
- To swap → B
- To return to the normal single-screen view



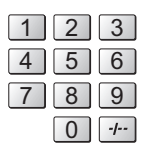
To change the channels

- Main screen



- Sub screen

Show the colour bar



To change the mode

- Main screen

→ Switch between TV and AV mode TV/AV

In AV mode

Show the colour bar



(Press any coloured buttons)

→ Change input mode (p. 16)

- Sub screen

Show the colour bar



→ Switch between TV and all AV mode in turn



Viewing Teletext

You can enjoy teletext broadcasting, including news, weather forecasts and subtitles, if this service is provided by the broadcasters.

What is TOP mode?

In TOP mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.

What is List mode?

In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. ("Store frequently viewed pages", p. 15)

■ **To change mode** → "Teletext" in Setup menu (p. 18)

1 Switch to Teletext

- Displays Index (content varies depending on the broadcasters)

2 Select the page

As the blue bar is displayed

■ **To adjust contrast** → MENU → [OK]

■ **To return to TV** → TEXT

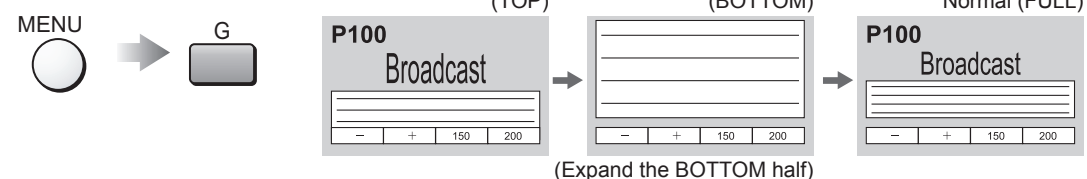
Using teletext conveniently

Reveal hidden data

Reveal hidden words e.g. quiz page answers



FULL / TOP / BOTTOM



HOLD

If you wish to hold the current page without updating
Stop or resume automatic updating

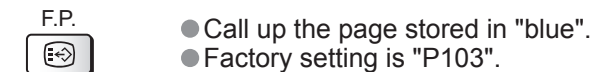


INDEX

Return to the main index page

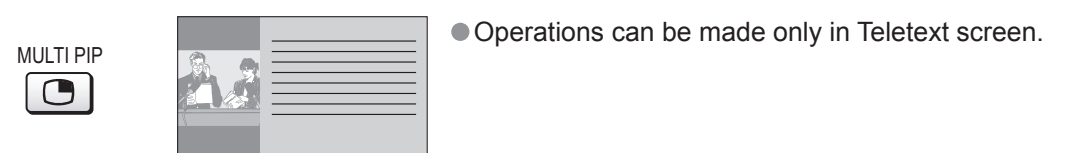


Call up a favourite pages



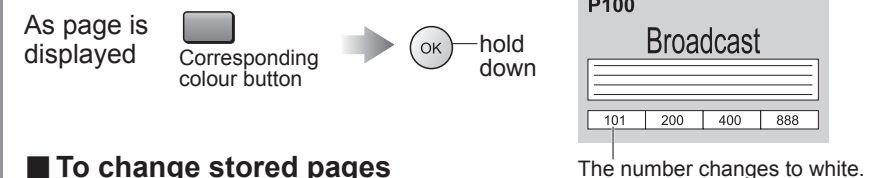
View in multi window

Watch TV and Teletext in two windows at once

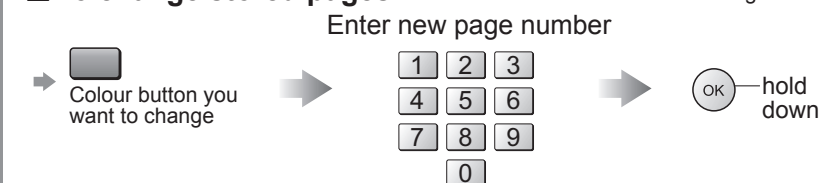


Store frequently viewed pages

Store frequently viewed pages (programme position 1 to 25) in the colour bar (List mode only)

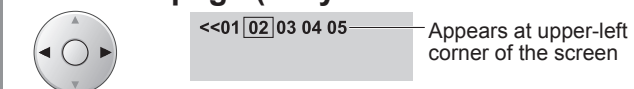


To change stored pages

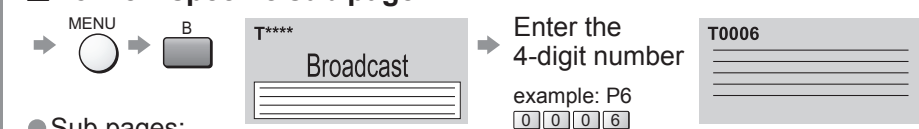


View sub page

View sub page (Only when teletext is more than one page)



To view specific sub page

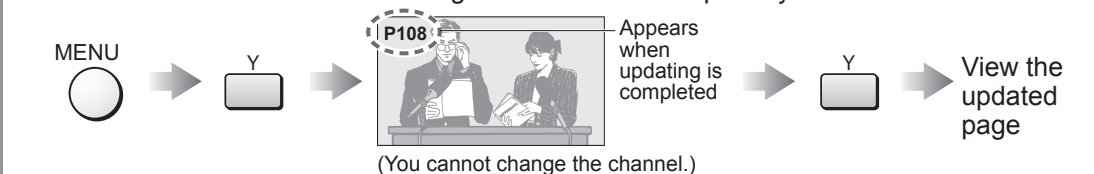


● Sub pages:
The number of sub pages varies depending on the broadcasters (up to 79 pages).
It may take some time for searching, during which time you can watch TV.

Watch TV while waiting for update

View the TV picture while searching for a teletext page

Teletext automatically updates itself when new information becomes available.
Changes to TV screen temporarily



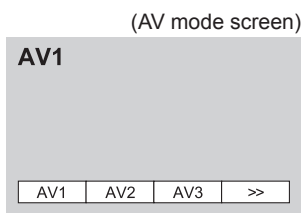

● The news page provides a function that indicates arrival of latest news ("News Flash").

Watching Videos and DVDs

It is possible to connect a variety of external equipment to the TV. Once the equipment is connected, use the following procedure to view the input.
To connect the equipment (p. 28)


1



With the equipment turned On
Select the external input



2

Select the connector
connected to the equipment

● example: AV1 → 

HDMI2 →  →  (twice)

● When colour bar disappears → Press any coloured buttons

● You can also select the connector using the TV/AV button on the front panel of the TV.
Press the button repeatedly until you reach the connector to view.










■ To return to TV






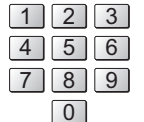
Note

- If the external equipment has an aspect adjustment function, set to "16:9".
- For details, see the manual of the equipment or ask your local dealer.

Panasonic equipment connected to the TV can be directly operated with the remote control.

	VCR / DVD switch* Select VCR to operate Panasonic VCR or DVD equipment Select DVD to operate Panasonic DVD equipment or Player theatre
	Standby Set to Standby mode / Turn on
	Play Playback VCR / DVD
	Stop Stop the operations
	Rewind / Skip / Search VCR: Rewind, review (during playback) DVD: Skip to the previous track or title Press and hold to search backward
	Fast-forward / Skip / Search VCR: Fast-forward, cue (during playback) DVD: Skip to the next track or title Press and hold to search forward
	Pause Pause / Restart DVD: Press and hold for slow-motion play
	Programme Up, Down Select programme
	Record Start recording

*The remote control will be available for various Panasonic equipment with the following settings.

- ① Switch to select VCR or DVD you want to change → 
- ② Press and hold  while operating ② → Enter the code below (two digit code) → Press 
- 

VCR	
Equipment	Code
VCR	10 (default)
DVD	11

DVD	
Equipment	Code
DVD	70 (default)
Player theatre	71

Note

- After setting, execute operation confirmation.
- The respective VCR / DVD code is turned to the default when battery has been exchanged. Set it again.
- Depending on the model, operation may not be possible.

How to Use Menu Functions

Various menus allow you to make settings for the picture, sound, and other functions so that you can enjoy watching TV in your own way.

1

Display menu

MENU

● Displays the functions that can be set (varies according to the input signal)

2

Select the menu

Main menu

Picture menu

Sound menu

Setup menu

(example: Picture menu)

3

Select the item

Picture menu

Menu

Contrast

Brightness

Colour

Sharpness

NTSC-Tint

Colour temperature

Colour management

D. PNR

MPEG NR

Mosquito NR

3D-COMB

Dynamic

Standard

On

Off

On

(example: Picture menu)

4

Adjust or select

Picture menu

Menu

Contrast

Brightness

Colour

Sharpness

NTSC-Tint

Colour temperature

Colour management

D. PNR

MPEG NR

Mosquito NR

3D-COMB

Dynamic

Standard

On

Off

On

(example: Picture menu)

select

access

select

change

store
(Required by some functions)

EXIT

MENU

TV

To return to TV

To return to the previous screen

Choose from among alternatives

Adjust using the slide bar

Go to the next screen

To reset the setting

- Display Menu in Picture menu or Sound menu (Bass, Treble) you want to reset

Menu list

Menu	Item	Adjustments / Configurations (alternatives)
Picture menu	Menu	Basic picture mode (Dynamic / Standard / Cinema / Auto) ● Set for each input signal Menu Dynamic
	Contrast, Brightness, Colour, Sharpness	Adjusts colour, brightness, etc. for each picture mode to suit your taste Contrast Brightness Colour Sharpness
	NTSC-Tint	Adjusts tint of image ● For NTSC signal reception only ● Item will be changed to "Tint" when receiving YUV(60Hz) or HDMI(60Hz) signal NTSC-Tint
	Colour temperature	Chooses the colour balance of the entire image (Cool / Standard / Warm) Colour temperature Standard
	Colour management	Automatically adjusts colours to vivid ones (Off / On) Colour management On
	D. PNR	Automatically reduces unwanted picture noise (Off / Strong / Weak / Auto) ● Set to Off when receiving a strong signal D. PNR Auto
	MPEG NR	Automatically reduces noise for watching DTV, DVD, VCD and SD Card (Off / Strong / Mid / Weak) MPEG NR Off
Sound menu	Mosquito NR	Automatically reduces flicker noise in the contoured parts of a picture (Off / Strong / Mid / Weak) ● Not valid on PC Mosquito NR Off
	3D-COMB	Automatically makes still pictures and slow pictures look more vivid (Off / On) ● For PAL or NTSC signal reception only ● Not valid on S-Video, components, PC, HDMI and SD Card 3D-COMB On
	Menu	Basic sound mode (Music / News / Cinema) ● Set for each input signal Menu Music
	Bass, Treble	Adjusts the output level of deep bass, high-pitch, shrill sound for each sound mode Bass Treble
	Balance	Adjusts volume level of right and left speakers Balance
	Headphone volume	Adjusts the volume of the headphones Headphone volume
	SRS TruSurround XT	SRS TruSurround XT® creates a high quality surround sound effect using just two speakers from the source which can output surround encoded signals (Off / On) ● Switching is also possible by SRS button on the remote control SRS TruSurround XT Off
Setup menu	HDMI1 / 3 input	Chooses according to the signal when HDMI1 or HDMI3 is connected (Auto / Digital / Analogue) (p. 32) ● HDMI2 terminal is for digital signal only HDMI1 input Auto
	HDMI setting	Control with HDMI function (p. 26) HDMI setting Access
	Teletext	Teletext display mode (TOP / List) (p. 14) Teletext TOP
	Off timer	Sets the time the TV automatically turns Off. (Off / 15 / 30 / 45 / 60 / 75 / 90) (minutes) Off timer Off
	Ch colour set	Colour density varying between broadcast channels can be adjusted to three levels for each reception channel ● Select the channel you want to adjust and set this function Ch colour set
	Child lock	Child lock can be set for each channel and each AV mode Image and sound are not available during Child lock On (Black screen will appear) ● Select the channel or AV mode you want to lock and set this function Child lock Off
	Side panel	Increases the brightness of the side panel (Off / Low / Mid / High) ● The recommended setting is High to prevent panel "after-image" Side panel Off
Setup menu	Power save	Reduces brightness of picture to economise on power consumption (Off / On) Power save Off
	SD card LED	Lights blue LED while SD Card is inserted (Off / On) (p. 25) SD card LED On
	Tuning menu	Edits or sets channels (p. 20) Tuning menu Access
	Owner ID	Inputs the owner ID (p. 22) Owner ID Access
	Colour system	Selects optional colour system based on video signals in AV mode (Auto / PAL / NTSC 4.43 / NTSC 3.58) Colour system Auto
	Colour matrix	Displayed during AV mode Available only with 480p or 576p input signals in a natural colour from digital equipment connected to AV2 / AV3 Component or HDMI1 / HDMI2 / HDMI3 terminals Select SD or HD to adjust suitable colour parameters for SD (standard definition) or HD (high definition) ● SD: Input signal is a normal TV system ● HD: Input signal is a High-Definition system Colour matrix SD
		● A different menu will be displayed while PC or SD Card is used. (p. 23 and p. 25) ● In AV mode, the Sound menu and Setup menu change a number of options.

How to Use Menu Functions
(picture, sound quality, etc.)

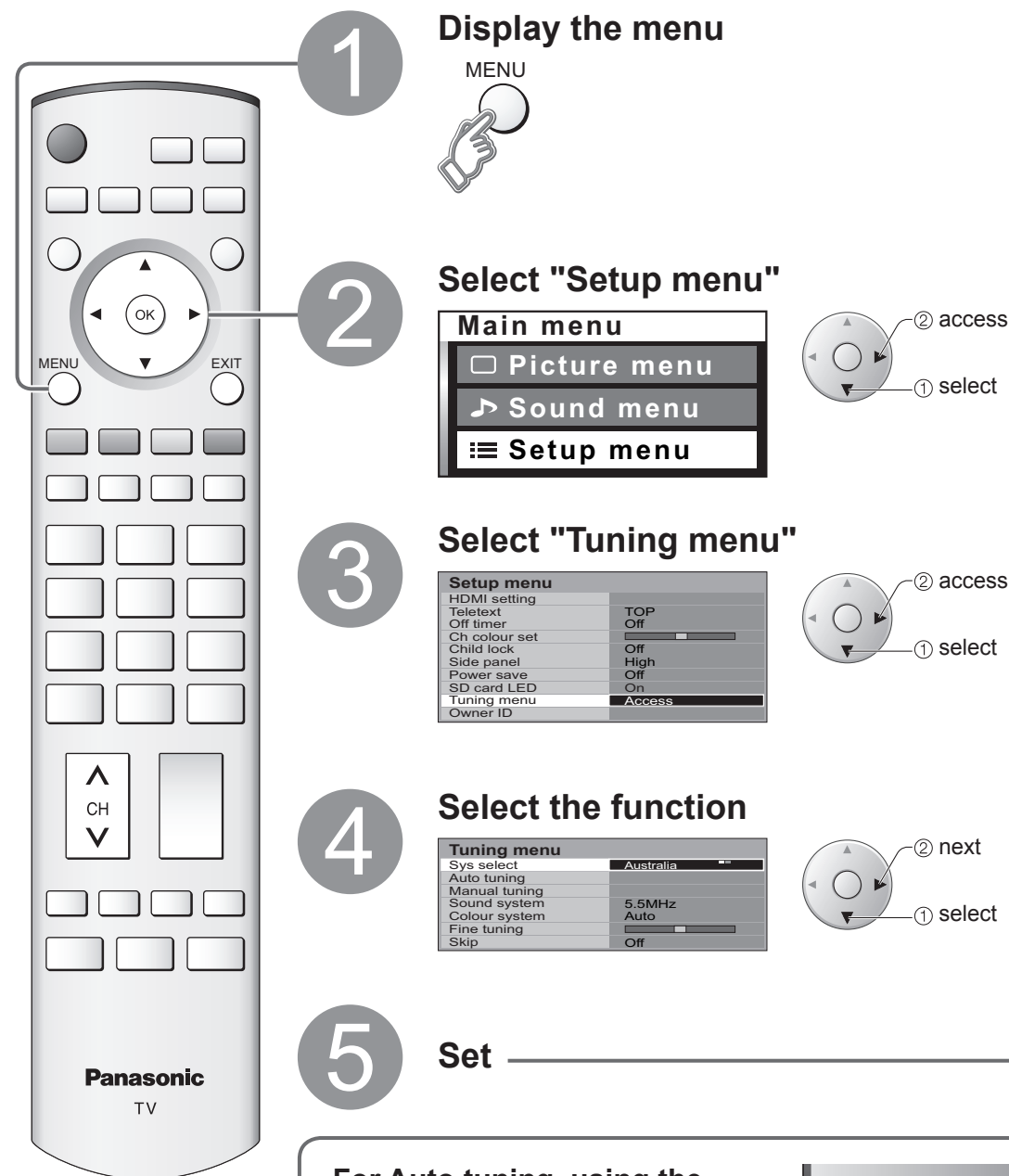
Advanced

18

19

Editing and Setting Channels

The current channel settings can be changed according to your needs and reception conditions.
For Auto tuning, see p. 10.



■ To exit



For Auto tuning, using the buttons on the TV ("Tuning mode" on p. 7)

- ① (Press repeatedly until "Tuning mode" appears)
- ② or (Access Tuning menu)
- ③ (Press repeatedly until "Auto tuning" is reached)
- ④ or (Searching channels)

■ To return to TV



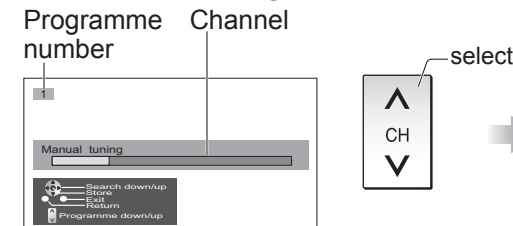
● Not available when Child lock in Setup menu is set (p. 18).

Set manually

Manual tuning

To freely change settings after Auto setup

① Select the programme number and search through the channel



② Store

- The programme number blinks.

③ Repeat ① and ②

Note

- If a VCR is connected with only the RF cable, select programme number "0".

For Manual tuning, using the buttons on the TV ("Tuning mode" on p. 7)

- ① (Press repeatedly until "Tuning mode" appears)
- ② or (Access Tuning menu)
- ③ (Press repeatedly until "Manual tuning" is reached)
- ④ or (Access Manual tuning)
- ⑤ (Programme, Channel (not displayed), Sound system)
- ⑥ or (Change programme, Start searching channels, Change sound system)
- ⑦ (Store)
- ⑧ ⑤-⑦ (Repeat)

- Not available when Child lock in Setup menu is set (p. 18).

■ To return to TV



Programme number (flash)

Sound system (flash)

Channel

Edit

Sound system

If the sound is weak or distorted, change the sound system used for a programme channel. (5.5MHz / 6.5MHz)

Select the channel you want to adjust ➡ Set this function ➡

Edit

Colour system

If the image is strange, change the colour system to the correct transmission signal being received. (Auto / PAL / NTSC 4.43 / NTSC 3.58)

Select the channel you want to adjust ➡ Set this function ➡

- Normally, select "Auto"

Small adjustment

Fine tuning

For the small adjustments to the tuning of an individual channel (useful for example when weather conditions are affecting reception quality of a programme)

Select the channel you want to adjust ➡ Set this function ➡

- To cancel Fine tuning, tune again by Manual tuning

Skip the programme

Skip

For the skip programme numbers which have no tuning datas

Select the channel you want to skip ➡ Set "Skip" to "On" ➡

- This function is only effective when pressing the Programme number up or down button either on the TV or on the remote control.

Owner ID

1

Display the menu

2

Select "Setup menu"

② access
① select

3

Select "Owner ID"

② access
① select

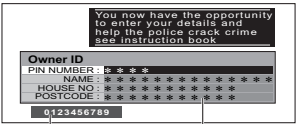
■ To exit

EXIT

Input owner ID

Entry of the security code (PIN number) and "personal information" (your name, address and zip code) in the TV allows the police to quickly trace the owner in case of theft.
If a PIN number has already been stored, personal information can be changed by entering that number.

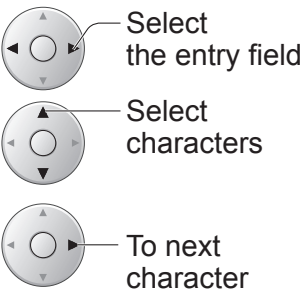
① Enter the 4-digit PIN number



Characters Entry field

- Make a note of the PIN number in case you forget it.

② Enter your name, address, and zip code, in that order



③ Store

OK — store

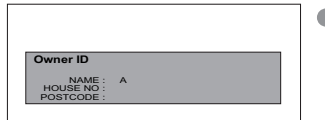
■ To change the stored information

Enter the
PIN number →

To check the "personal information" stored

F Hold down for about
6 sec.

Displays the information on
the screen (for several sec.)



- The PIN number is not displayed.

Displaying PC Screen on TV

The screen of the PC connected to the TV can be displayed on the TV.
You can also listen to PC sound with the audio cable connected. To connect PC (p. 28)

1

Select the external input

2

Select "PC"

① B (To next page)
② Y

AV2
AV1 AV2 AV3 >>

PC

■ To return to TV →

Displays PC screen

- Corresponding signals (p. 34)
- If "H-freq." or "V-freq." is shown in red, the signals may not be supported.

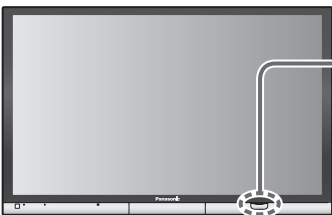
■ PC menu setting (changed as desired)

- Making settings → "How to Use Menu Functions" ① to ④ (p. 18)

Menu	Item	Adjustments / Configurations (options)
Picture menu	Menu, Contrast, Brightness, Sharpness, Colour temperature (p. 18)	
	Advanced setting	W/B High R White balance of bright red area
		W/B High B White balance of bright blue area
		W/B Low R White balance of dark red area
		W/B Low B White balance of dark blue area
Setup menu	Gamma	(2.0 / 2.2 / 2.5 / S Curve)
	Input resolution	Switches to a wide view ● VGA (640 × 480 dots), WVGA (852 × 480 dots), XGA (1,024 × 768 dots), WXGA (1,366 × 768 dots) ● Options change depending on signals
	Clock	Set to the minimum level if noise occurs
	H-pos	Adjust horizontal position
	V-pos	Adjust vertical position
	Clock phase	Eliminate flicker and distortion ● Adjust after Clock adjustment
	Sync	Chooses another synchronous signal if the image is distorted (H&V / On G) ● H&V : by the horizontal and vertical signals from your PC On G : by the green signal from your PC (if available)
	HDMI setting, Side panel, Power save, SD card LED (p. 18)	
	● Sound menu (p. 18)	

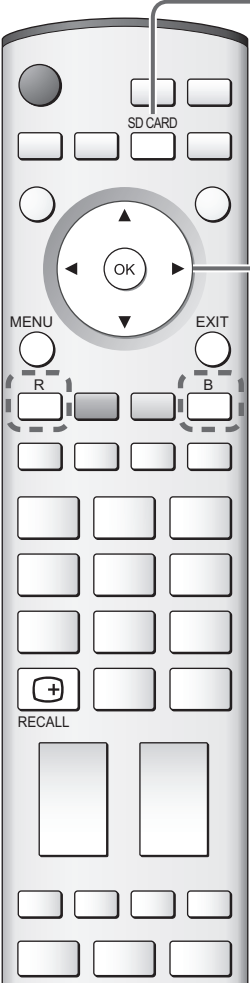
Viewing SD Card (Photos)

The still images recorded by the digital camera will be displayed.



- 1
- Insert the SD Card**

 - For details on SD Cards, see p. 34.



- 2
- Select SD mode (PHOTO VIEW MODE)**

- 3
- Select the photo to be viewed**

Error display (images that could not be loaded, etc.)

Selected photo

PHOTO VIEW MODE

Filename 100-0001
Date 01/01/2001
Pixel 15X16

Select
View
Select
Exit
Slide show
SD CARD : Return

Selected photo information is displayed

(Thumbnail screen)

1 select
2 view

Slide show → R

 - For details, see p. 25

- 4
- View**

To display the operation guide → RECALL

Operation guide

Displayed one at a time

To previous photo
To thumbnail
Rotate 90° (clockwise)
To next photo

Rotate 90° (anti-clockwise)

To return to thumbnail screen



To return to TV



Caution

- During the operation, no signals are output from the monitor output terminals.
- "Date" shows the date on which the recording was made by the digital camera. It shows "***/**/****" when recordings are made without date signal.

Cautions in handling SD Card

- Do not remove the card while the TV is accessing data (this can damage card or TV).
- Do not touch the pins on the back of the card.
- Do not subject the card to a high pressure or impact.
- Insert the card in the correct direction (otherwise, card may be damaged).
- Electrical interference, static electricity, or erroneous operation may damage the data or card.
- Back up the recorded data at regular intervals in case of deteriorated or damaged data or erratic operation of the TV. (Panasonic is not liable for any deterioration or damage of recorded data.)

SD Card

To open

Blue LED ① Press

② Open the cover

To insert

Label surface

Push until a click is heard

To remove

Press the centre of the card

Note

- Blue LED lights while SD Card is inserted if set "SD card LED" to "On" in Setup menu (p. 18).

Slide show

- Start Slide show (operate in step 3)**
- ① Select the photo for the first view ② Start Slide show
- R
- To stop in mid-cycle → SD CARD
- Slide show settings (operate in step 3 or 4)**
- ① Display the menu ② Select "Card setup menu" ③ Select the functions and set
- MENU → **Main menu** → **Card setup menu** → **Card setup menu**
- "Picture menu" (p. 18)
- ② access ① select ② set
- Card setup menu**
- Interval
 - Repeat
- View Software Licence information

Menu	Item	Adjustments / Configurations (alternatives)
Card setup menu	Interval	Select slide show interval (5 / 10 / 15 / 30 / 60 / 90 / 120sec)
	Repeat	Slide show repeat (Off / On)

On screen messages

Message	Meaning / Action
Is SD Card in?	● Insert a SD card.
No valid file to play	● The card has no data.
Cannot read file	● The file is broken or unreadable. ● The TV does not support the format. (For the applicable formats and data, see p. 34.)

External Equipment

Control with HDMI "HDAVI Control"™*

*Enjoy additional HDMI Inter-Operability with Panasonic products which have "HDAVI Control" function. HDMI connections to some Panasonic equipments (Panasonic DVD Recorder Diga, Panasonic Player theatre, Panasonic Amplifier, etc.) allow you to enjoy the easy playback or home theatre. About connections, see p. 27. Read the manuals of the equipment too. Non-HDMI-compliant cables cannot be utilized. About applicable equipments, consult your local Panasonic dealer.

Preparations
(For the first time / When adding new equipment, reconnecting equipment or changing setup)
After connection turn the equipment on and then switch the TV on.
Select the input mode to HDMI1, HDMI2 or HDMI3 (p. 16), and make sure that an image is displayed correctly.

1

Display the menu

2

Select "Setup menu"

Main menu	
Home theatre	
Picture menu	
Sound menu	
Setup menu	

3

Select "HDMI setting"

Setup menu	
HDMI setting	Access
Teletext	TOP
Off timer	Off
Ch colour set	
Child lock	Off
Side panel	High
Power save	Off
SD card LED	Off
Tuning menu	On
Owner ID	On

4

Select "Control with HDMI" and set to "On"

HDMI setting	
Control with HDMI	On
Power off link	Set
Power on link	Set

● It is recommended that you use Panasonic's HDMI cable.
Recommended part number:
RP-CDHG15 (1.5 m)
RP-CDHG30 (3.0 m)
RP-CDHG50 (5.0 m)

Connections for Control with HDMI

Easy playback

(For connection to HDMI2 or HDMI3 terminal, refer to p. 28)

Rear of the TV

Front of the TV

Panasonic DVD recorder Diga

Home theatre

This TV

Panasonic Amplifier

Speaker system

Panasonic DVD recorder Diga

This TV

Panasonic Player theatre

Speaker system

Read the manuals of Panasonic Amplifier or Player theatre for details.

Easy playback

Automatic Input switching-When the connected Panasonic equipment is operated, input mode is switched automatically. When it is stopped operating, input mode is not returned.

You can control the theatre speaker with TV's remote control. This function is available when Panasonic Amplifier or Player theatre is connected.

Theatre speaker

1 Display the menu

2 Select "Home theatre" or "TV speaker"

Main menu	
Home theatre	
Picture menu	
Sound menu	
Setup menu	

Home theatre:

Adjustment for equipment (automatically turned on if it is in Standby mode)

Volume up / down

Mute

TV speaker:

TV speakers are active.

● When selecting "Home theatre", the sound of TV speakers is mute.

● When the equipment is turned off, TV speakers will be active.

Power on link

Set to "Set"

When the connected Panasonic equipment is operated, TV is also automatically turned on and the content is reproduced. (Only when TV is in Standby mode.)

Power off link

Set to "Set"

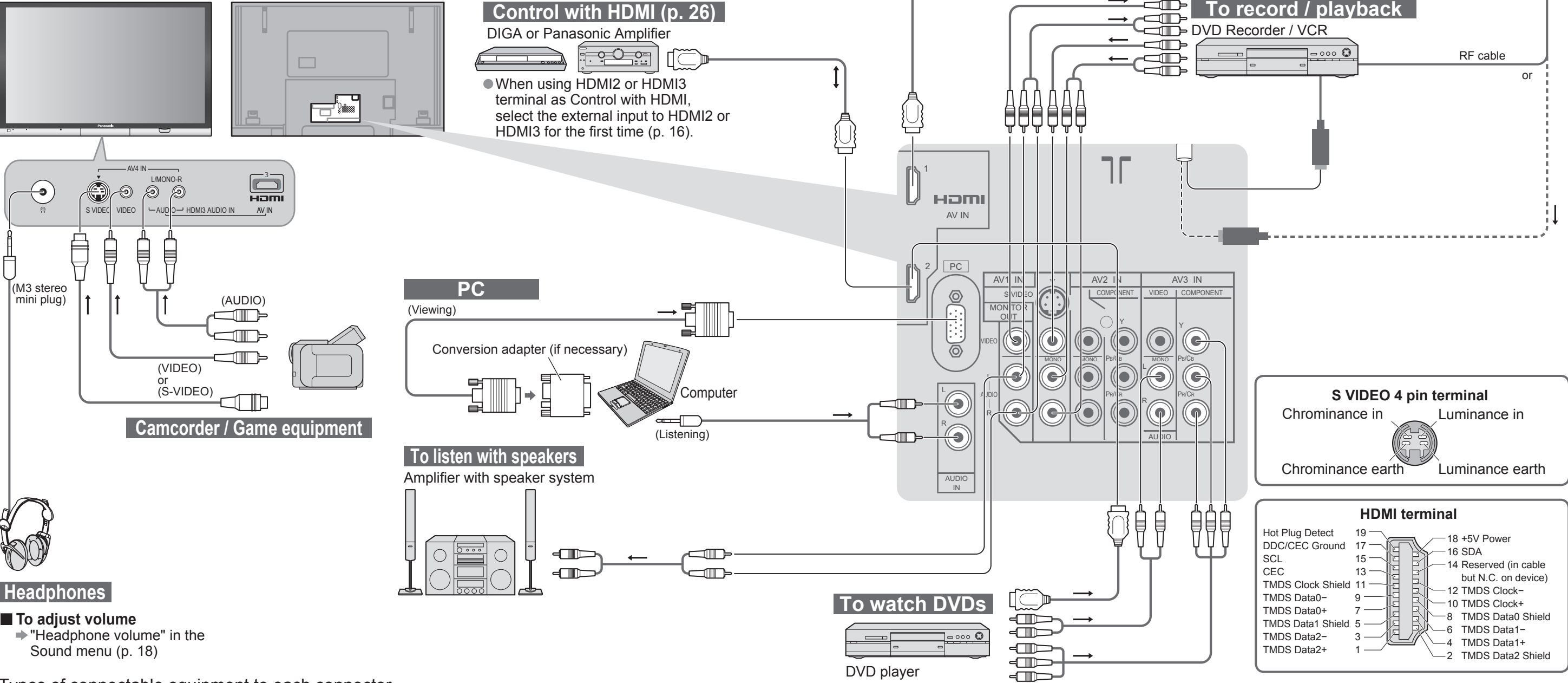
When TV is set to Standby mode, the connected Panasonic equipment is also automatically set to Standby.

Note
● The TV remains on even if the "Control with HDMI" compatible equipment is turned off.

External Equipment

Connections

These diagrams show our recommendations for how to connect the TV to your various equipment. For other connections, consult the instructions of each equipment, the table below, and the specifications (p. 38).



Types of connectable equipment to each connector

Connector	AV1 IN	AV2 IN	AV3 IN	AV4 IN	MONITOR OUT	HDMI		
Recording / Playback (equipment)						1	2	3
■ To record / playback videocassettes / DVDs (VCR / DVD recorder)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
■ To watch DVDs (DVD player)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
■ To watch camcorder images (Video camera)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
■ To watch satellite broadcasts (Set top box)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
■ To play games (Game equipment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
■ Control with HDMI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Connect the S-VIDEO or VIDEO terminal when using AV1 / AV4 IN terminals.
- Connect the COMPONENT or VIDEO terminal when using AV2 / AV3 IN terminals.

○: Recommended Connection

Technical Information

Channel Allocation

Sys select	NZ/INDONES	Australia
RECEIVE CHANNEL	- 1 2 } 11 - - - - - - -	- 0 1 2 3 4 5 S2 } S10 6 } 9 9A
	21 } 62 63 } 69	10 11 12 S11 } S44 20 21 }
	- - - S'1 S'2 S'3 - - -	
	S1 S2 } S10	
	S11 S12 S13 S14 S15 S16 S17 S18 S19 S20	
	S21 } S41 - -	69 - - - - -

Note

● Programme number will be given in order for the received channel.

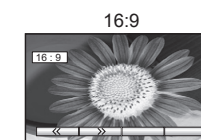
Aspect Ratio

The optimum size and aspect can be chosen, and you can enjoy finer images. (p. 12)

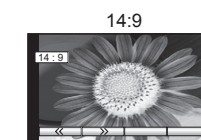
Signal name		Aspect modes							
		16:9	14:9	Just	4:3	4:3 Full	Zoom1	Zoom2	Zoom3
TV/AV1/AV2/AV3/AV4	PAL	○	○	○	○	—	○	○	○
	PAL 525/60	○	○	○	○	—	○	○	○
	M.NTSC	○	○	○	○	—	○	○	○
	NTSC	○	○	○	○	—	○	○	○
Component/HDMI	480i (60 Hz)	○	○	○	○	—	○	○	○
	480p (60 Hz)	○	○	○	○	—	○	○	○
	576i (50 Hz)	○	○	○	○	—	○	○	○
	576p (50 Hz)	○	○	○	○	—	○	○	○
	720p (50 Hz)	○	○	○	○	○	○	○	○
	720p (60 Hz)	○	○	○	○	○	○	○	○
	1080i (50 Hz)	○	○	○	○	○	○	○	○
	1080i (60 Hz)	○	○	○	○	○	○	○	○
	1080p (50 Hz)	○	○	○	○	○	○	○	○
	1080p (60 Hz)	○	○	○	○	○	○	○	○
PC input		○	—	—	○	—	—	—	—

Note

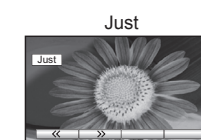
- The ratio varies depending on the programme, etc. If the ratio is greater than the standard "16:9", black bands may appear at the top and bottom of the screen.
- If the screen size looks unusual when a widescreen-recorded programme is played back on a VCR, adjust the tracking of the VCR. (See the VCR manual.)
- To select the ratio manually: (Only "16:9" or "4:3" in PC mode)



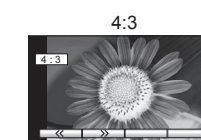
- Directly displays the image at "16:9" without distortion (anamorphic).



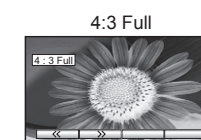
Displays the image at the standard "14:9" without enlargement.



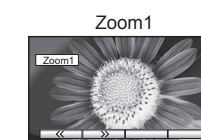
- Displays a 4:3 image full-screen. Stretching is only noticeable at the left and right edges.



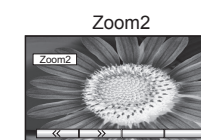
Displays the image at the standard "4:3" without distortion.



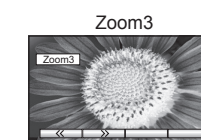
Displays a "4:3" image enlarged horizontally to fit the screen.



- Displays a "16:9" letterbox or "4:3" image without distortion.



Displays a "16:9" letterbox (anamorphic) image full-screen without distortion.



Displays a "2.35:1" letterbox (anamorphic) image full-screen without distortion. At "16:9", displays the image at its maximum (with slight enlargement).

Technical Information

HDMI connection

HDMI (high-definition multimedia interface) allows you to enjoy high-definition digital images and high-quality sound by connecting the TV and the equipment.

HDMI-compatible equipment (*1) with an HDMI output terminal, such as a set top box or a DVD player, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.

- HDMI is the world's first complete digital consumer AV interface complying with a non-compression standard.
- If the external equipment has only a DVI output, connect to the HDMI1 or HDMI3 terminal via a DVI to HDMI adapter cable (*2).
- When the DVI to HDMI adapter cable is used, connect the audio cable to the audio input terminal.
- Audio settings can be made on the "HDMI1 / 3 input" menu screen. (p. 18)
- Applicable audio signal sampling frequencies (2ch L.PCM): 48 kHz, 44.1 kHz, 32 kHz

(*1): The HDMI logo is displayed on an HDMI-compliant equipment. (*2): Enquire at your local digital equipment retailer shop.

Note

- HDMI2 terminal is for digital signal only.
- Use with a PC is not assumed.
- The 720p/1080i signals will be reformatted before being displayed on the screen.
- If the connected equipment has an aspect adjustment function, set the aspect ratio to "16:9".
- These HDMI connectors are "type A".
- An equipment having no digital output terminal may be connected to the input terminal of either "Component", "S-VIDEO", or "Video" to receive analogue signals.
- The HDMI input terminal can be used with only the following image signals: 480i, 480p, 576i, 576p, 720p, 1080i and 1080p. Match the output setting of the digital equipment.
- For details of the applicable HDMI signals, see p. 34.
- DVI picture position is controlled by the source equipment (ie; STB, DVD player etc.). If you experience picture position errors using DVI to HDMI adapter cable, please contact the source equipment manufacturer.

PC connection

A PC may be connected to this TV so that the PC screen is displayed and sound is heard from the TV.

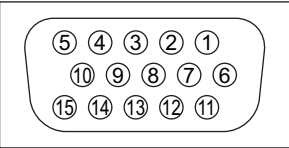
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

Note

- Some PC models cannot be connected to this TV.
- For details of the applicable PC signals, see p. 34.
- Max. display resolution

Aspect	4:3	1,440 × 1,080 pixels
	16:9	1,920 × 1,080 pixels

- D-sub 15-pin connector signal



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R	⑥	GND (Ground)	⑪	NC (not connected)
②	G	⑦	GND (Ground)	⑫	NC (not connected)
③	B	⑧	GND (Ground)	⑬	HD/SYNC
④	NC (not connected)	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	NC (not connected)

Control with HDMI

HDMI connections to some Panasonic equipments allow you to enjoy the easy playback or home theatre.

- Setup the equipment to enable this function. Read the manual of the equipment.
- This function may not work normally depending on the equipment condition.
- This function may not work normally when Panasonic Player theatre is connected.
- The equipment can be operated by TV's remote control with this function on even if TV is in Standby mode.
- Image or sound may not be available for the first few seconds when the playback starts.
- Image or sound may not be available for the first few seconds when Input mode is switched.
- Volume function will be displayed when adjusting the volume of the equipment.
- Easy playback is also available by using the remote control for Amplifier. Read the manuals of Amplifier.
- "Control with HDMI" function is not possible using DVI connection.

Multi Window

You can watch two images at once, such as a TV programme and a DVD. (p. 12)

- The same video sources cannot be displayed simultaneously in multi window.
- Multi window cannot be used with a PC, HDMI, SD card, or when 480p, 576p, 720p, 1080i signals (Y, Pb/Cb, Pr/Cr) are being displayed from AV input.
- Some signals are reformatted for suitable viewing on your display.

Stereo / Bilingual Sound Selection

When you receive the stereo / bilingual sound system, sound output modes can be selected by pressing the **I/II** button.

Audio Signal	STEREO	MAIN I	SUB II	MONO
Mode Indicator	⊕	I	II	▽

NICAMUsed in New Zealand, Singapore, Hong Kong etc.

Type of broadcast	Regular broadcast (Standard Audio)	Regular + NICAM MONO I (MAIN I)	NICAM STEREO	NICAM DUAL MONO (MAIN I / SUB II)
Mode Indicator	No Indicator ↔ ▽	I ↔ ▽	⊕ ↔ ▽	I ↔ II ▽

A2(German)Used in Australia, Malaysia etc.

Type of broadcast	Regular broadcast (Standard Audio)	BILINGUAL or DUAL MONO: MAIN I / SUB II	STEREO
Mode Indicator	No Indicator ↔ ▽	I ↔ II	⊕ ↔ ▽

Note

- If the stereo signal is poor or the receiving conditions are not optimum or if STEREO:MONO automatic switching occurs, it is recommended you switch from STEREO to MONO.
- Even when the contents of the receiving signal undergo changes, selection mode is kept intact.
- When the receiving conditions deteriorate, listening will be easier if the mode is set to the MONO position, using the stereo / bilingual sound selection button.
- DUAL, also known as DUAL MONO or as BILINGUAL is not currently transmitted in some countries.

Technical Information

Input signal that can be displayed

COMPONENT (Y, P_B/C_B, P_R/C_R), HDMI

* Mark: Applicable input signal

Signal name	COMPONENT	HDMI
480i (60 Hz)	*	*
480p (60 Hz)	*	*
576i (50 Hz)	*	*
576p (50 Hz)	*	*
720p (60 Hz)	*	*
720p (50 Hz)	*	*
1,080i (60 Hz)	*	*
1,080i (50 Hz)	*	*
1,080p (60 Hz)		*
1,080p (50 Hz)		*

PC (D-sub 15P)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 400 @70 Hz	31.46	70.07
640 × 480 @60 Hz	31.47	59.94
640 × 480 @75 Hz	37.50	75.00
852 × 480 @60 Hz	31.47	59.94
800 × 600 @60 Hz	37.88	60.32
800 × 600 @75 Hz	46.88	75.00
800 × 600 @85 Hz	53.67	85.06
1,024 × 768 @60 Hz	48.36	60.00
1,024 × 768 @70 Hz	56.48	70.07
1,024 × 768 @75 Hz	60.02	75.03
1,024 × 768 @85 Hz	68.68	85.00
1,280 × 1,024 @60 Hz	63.98	60.02
1,366 × 768 @60 Hz	48.36	60.00
Macintosh13" (640 × 480)	35.00	66.67
Macintosh16" (832 × 624)	49.72	74.54
Macintosh21" (1,152 × 870)	68.68	75.06

Note

- Signals other than above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.

Data format for Card browsing

Photo : Still images recorded with digital still cameras compatible with JPEG files of DCF* and EXIF standards

Data format : Baseline JPEG (Sub-sampling 4:4:4, 4:4:2 or 4:2:0)

Max. number of files : 9,999

Image resolution : 8 × 8 to 5,120 × 3,840

● Compliant card type (maximum capacity): SDHC Card (4 GB), SD Card (2 GB), Multi Media Card (128 MB), miniSD Card (1 GB) (requiring miniSD adapter)

● If miniSD Card is used, insert / remove it together with the adapter.

● Check the latest information on the card type at the following website. (English only)
<http://panasonic.co.jp/pavc/global/cs/>

*DCF (Design rule for camera file system): Unified standard established by Japan Electronics and Information Technology Industries Association (JEITA).

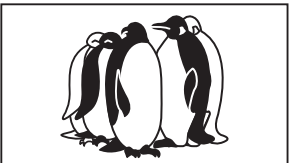
Note

- A JPEG image modified with a PC may not be displayed.
- Images imported from a PC must be compatible with EXIF (Exchangeable Image File) 2.0, 2.1, and 2.2.
- Partly degraded files might be displayed at a reduced resolution.
- Only ".JPG" extension can be read by this TV.
- The folder and file names may be different depending on the digital camera used.
- Do not use two-byte characters or other special codes.
- The card may become unusable with this TV if file or folder names are changed.

FAQs

Before requesting service or assistance, please follow these simple guides to resolve the problem. If problem still persists, please contact your local Panasonic dealer or Panasonic Customer Care Centre for assistance.

White spots or shadow images (noise)



- Check the position, direction, and connection of the aerial.

VIERA logo appears at the four corners of the screen

Contrast is reduced

- The function to prevent after-image is activated. (Not a faulty symptom)
- The screen saver is activated if the TV is not operated for a certain time in AV mode.
- Contrast is lowered when menu, etc. lasts for several minutes.
- "after-image" (p. 5)

Only one part remains dark

- A pixel or luminescent spot may occasionally be missing in plasma displays. (Not a faulty symptom)

Pictures from an equipment are unusual when the equipment is connected via HDMI

- Is the HDMI cable connected properly? (p. 28)
- Turn Off the TV and equipment, then turn them On again.
- Check an input signal from the equipment. (p. 34)
- Use an equipment compliant with EIA/CEA-861/861B.

The remote control does not work

- Are the batteries installed correctly? (p. 6)
- Has the TV been switched On?

FAQs

Problem		Actions	
Screen	Chaotic image, noisy	<ul style="list-style-type: none">● Set "D. PNR" in the Picture menu (to remove noise). (p. 18)● Check nearby electrical products (car, motorcycle, fluorescent lamp).	
	No image can be displayed	<ul style="list-style-type: none">● Is "Colour" or "Contrast" in the Picture menu set to the minimum? (p. 18)● Check "Colour system" (p. 20)	
	Blurry or distorted image (no sound or low volume)	<ul style="list-style-type: none">● Reset channels. (p. 10 and p. 20)	
	Neither image nor sound is produced	<ul style="list-style-type: none">● Is the TV in "AV mode"?● Is the mains lead plugged into the socket outlet?● Is the TV turned On?● Check Picture menu (p. 18) and volume.	
Sound	No sound is produced	<ul style="list-style-type: none">● Is "Sound Mute" active? (p. 7)● Is the volume set to the minimum?	
	Sound level is low or sound is distorted	<ul style="list-style-type: none">● Sound signal reception may be deteriorated.● Check "Sound system" (p. 20)	
	Whirling sound is heard	<ul style="list-style-type: none">● The sound is from built-in cooling fan (not a sign of faulty operation).	

Problem		Actions	
HDMI	Sound is unusual	<ul style="list-style-type: none">● Set the sound setting of the connected equipment to "2ch L.PCM".● Check the "HDMI1 / 3 input" setting in the Sound menu. (p. 18)● If digital sound connection has a problem, select analogue sound connection. (p. 32)	
	An error message appears	<ul style="list-style-type: none">● Contact the authorized Service Centre.	
	"Control with HDMI" function does not work	<ul style="list-style-type: none">● Switch the TV on again with the equipment on.● Set "Control with HDMI" to "Off", then set to "On" again. (p. 26)	
Other	TV goes into "Standby mode"	<ul style="list-style-type: none">● The sleep function is activated.● The TV enters "Standby mode" about 30 min. after broadcasting ends.	
	An error message appears	<ul style="list-style-type: none">● Follow the message's instructions.● If the problem persists, contact the authorized Service Centre.	

Specifications

Power Source	AC 220-240 V, 50 / 60 Hz											
	Average use	770 W										
	Standby condition	0.3 W										
Plasma Display panel	Drive method	AC type										
	Aspect Ratio	16:9										
	Visible screen size	165 cm 1,434 mm (W) × 807 mm (H) × 1,646 mm (diagonal)										
Sound	No. of pixels	2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]										
	Audio Output	30 W (15 W + 15 W), 10 % THD										
	Headphones	M3 (3.5 mm) stereo mini Jack × 1										
PC signals		VGA, SVGA, XGA SXGA (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz										
Receiving Systems / Band name		<table><tr><td>1. PAL B/G</td><td>Reception of Off air broadcasts</td></tr><tr><td>2. NTSC 4.43</td><td>Playback from Video Tape Recorders</td></tr><tr><td>3. NTSC 3.58</td><td>Playback from Special Video Tape Recorders and Special Video Disc Players</td></tr><tr><td>4. PAL 60Hz</td><td>(Via the AV Sockets) only.</td></tr></table>			1. PAL B/G	Reception of Off air broadcasts	2. NTSC 4.43	Playback from Video Tape Recorders	3. NTSC 3.58	Playback from Special Video Tape Recorders and Special Video Disc Players	4. PAL 60Hz	(Via the AV Sockets) only.
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4. PAL 60Hz	(Via the AV Sockets) only.											
Receiving Channels (Regular TV)		VHF 0 to 12 UHF 21 to 69 S'1 to S'3 S1 to S41 PAL B PAL G HYPER TUNER										
Aerial - Rear		VHF / UHF										
Operating Conditions		Temperature : 0 °C - 40 °C										
Connection Terminals	AV1 Input	AUDIO L - R	RCA PIN Type × 2		0.5 V[rms]							
		VIDEO	RCA PIN Type × 1		1.0 V[p-p] (75 Ω)							
		S VIDEO	Mini DIN 4-pin		Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)							
	AV2 Input	AUDIO L - R	RCA PIN Type × 2		0.5 V[rms]							
		VIDEO	RCA PIN Type × 1		1.0 V[p-p] (75 Ω)							
		COMPONENT	Y PB/CB, PR/CR		1.0 V[p-p] (including synchronization) ±0.35 V[p-p]							
	AV3 Input	AUDIO L - R	RCA PIN Type × 2		0.5 V[rms]							
		VIDEO	RCA PIN Type × 1		1.0 V[p-p] (75 Ω)							
		COMPONENT	Y PB/CB, PR/CR		1.0 V[p-p] (including synchronization) ±0.35 V[p-p]							
	AV4 Input	AUDIO L - R	RCA PIN Type × 2		0.5 V[rms]							
		VIDEO	RCA PIN Type × 1		1.0 V[p-p] (75 Ω)							
		S VIDEO	Mini DIN 4-pin		Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)							
	Others	HDMI1/2/3 Input	TYPE A Connectors									
		PC Input	HIGH-DENSITY D-SUB 15PIN		R, G, B/0.7 V[p-p] (75 Ω) HD, VD/TTL Level 2.0 - 5.0 V[p-p] (high impedance)							
		Audio Input	RCA PIN Type × 2		0.5 V[rms]							
		Card slot	SD CARD slot × 1									
	Monitor Output	AUDIO L - R	RCA PIN Type × 2		0.5 V[rms] (high impedance)							
		VIDEO	RCA PIN Type × 1		1.0 V[p-p] (75 Ω)							
Dimensions (W × H × D)		1,554 mm × 985 mm × 145 mm (TV only) 1,754 mm × 1,058 mm × 419 mm (With pedestal and speakers)										
Weight		79.0 kg Net (TV only) 110.0 kg Net (With pedestal and speakers)										

Note

● Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.

WARRANTY - Australia only

1. The product is warranted for 12 months from the date of purchase. Subject to the conditions of this warranty Panasonic or it's Authorised Service Centre will perform necessary service on the product without charge for parts or labour if, in the opinion of Panasonic, the product is found to be faulty within the warranty period.

2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or it's territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.

3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.

4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:

(a) Video or Audio Tapes	(d) Cabinet Parts	(g) Microwave Oven cook plates.
(b) Video or Audio Heads and Stylii resulting from wear and tear in normal use	(e) User replaceable Batteries	(h) Kneader mounting shaft unit (bread bakery)
(c) Shaver Heads or Cutters	(f) Thermal Paper, Toner/Ink Cartridges, Drums, Developer, Film (Ink/Ribbon), Film Cartridge, Printer Heads	

5. If warranty service is required you should:

- Telephone Panasonic's Customer Care Centre on 132600 or visit our website and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
- Send or bring the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as a proof of purchase date. Please note that freight and insurance to and / or from your nearest Authorised Service Centre must be arranged by you.
- Note that home or pick-up/delivery service is available for the following products in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centres:
(a) Picture tube (CRT) based Television Receivers (screen sizes greater than 66cm); Rear Projection TV's; Plasma/LCD televisions / displays (screen size greater than 103 cm)
(b) Convection/Combination Microwave Ovens
(c) Whiteboard (except portable type)

6. The warranties hereby conferred do not extend to, and exclude, any costs associated with the installation, de-installation or re-installation of a product, including costs related to the mounting, de-mounting or remounting of any screen, (and any other ancillary activities), delivery, handling, freighting, transportation or insurance of the product or any part thereof or replacement of and do not extend to, and exclude, any damage or loss occurring by reason of, during, associated with, or related to such installation, de-installation, re-installation or transit.

Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600 or visit our website and use the Service Centre Locator.

Unless otherwise specified to the consumer the benefits conferred by this express warranty are additional to all other conditions, warranties, guarantees, rights and remedies expressed or implied by the *Trade Practices Act 1974* and similar consumer protection provisions contained in legislation of the States and Territories and all other obligations and liabilities on the part of the manufacturer or supplier and nothing contained herein shall restrict or modify such rights, remedies, obligations or liabilities.

November 2005

THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE) SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

If you require assistance regarding warranty conditions or any other enquiries, please visit the **Panasonic Australia website**
www.panasonic.com.au or by phone on 132 600

If phoning in, please ensure you have your operating instructions available.

Panasonic Australia Pty. Limited
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WARRANTY - New Zealand only

WE WARRANT that the Panasonic Television that you have purchased is free from defects in material and workmanship under normal home use and service.

Accordingly, we undertake to repair, or at our option, replace without cost to the owner, either for material or labour, any part which within 12 months from the date of delivery is found to be defective, provided that the appliance has been used for domestic purposes only and in accordance with the instructions given in the Instruction Book and not been subjected to misuse, neglect or installed, dismantled, repaired or serviced by any other than an authorised Panasonic New Zealand Dealer or Panasonic New Zealand Authorised Service Centre.

NOTE

- Before reporting a fault, please ensure that you read the item "Troubleshooting" in the information section of your Panasonic Instruction Book.
- It is important to retain your proof of purchase as this will be required by the serviceman or retailer as proof of purchase date, should service be required.
- In the event of service being required, contact your Panasonic New Zealand retailer or Panasonic New Zealand Authorised Service Centre.

IMPORTANT

Any request for warranty service must be through an Authorised Panasonic New Zealand Service Centre who during the period of the warranty, undertakes to make any necessary adjustment and fit any replacement part supplied by the manufacturer, during normal working hours, or alternatively will arrange for such service to be provided by some other Panasonic New Zealand Authorised Service Centre.

NEW ZEALAND

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